SURREBUTTAL TESTIMONY OF

DAVID J. GARRETT

ON BEHALF OF

THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF

DOCKET NO. 2019-290-WS

IN RE: APPLICATION OF BLUE GRANITE WATER COMPANY FOR APPROVAL TO ADJUST RATE SCHEDULES AND INCREASE RATES

I. INTRODUCTION

Q. STATE YOUR NAME AND OCCUPATION.

A. My name is David J. Garrett. I am a consultant specializing in public utility regulation. I am the managing member of Resolve Utility Consulting, PLLC. I focus my practice on the primary capital recovery mechanisms for public utility companies: cost of capital and depreciation.

Q. DID YOU FILE DIRECT TESTIMONY AND EXHIBITS RELATED TO THIS PROCEEDING?

A. Yes. I filed direct testimony and twenty (20) exhibits with the Public Service Commission of South Carolina ("Commission") on January 23, 2020, on behalf of the South Carolina Office of Regulatory Staff ("ORS"). In my direct testimony, I addressed the depreciation studies of the water and wastewater plant assets of Blue Granite Water Company ("BGWC" or the "Company"). The Company's proposed depreciation rates are presented in these depreciation studies, which are sponsored by Company witness John Spanos and

discussed in his direct testimony. My qualifications also were discussed in my direct testimony.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. My surrebuttal testimony will respond to issues raised in the rebuttal testimony of Company witness John J. Spanos.

Q. DID ANY OF THE ARGUMENTS COMPANY WITNESS SPANOS RAISED IN HIS REBUTTAL TESTIMONY CAUSE YOU TO CHANGE YOUR POSITION AS STATED IN YOUR DIRECT TESTIMONY?

A. No. Additionally, to the extent I do not specifically address a statement made in any of the Company's rebuttal testimony that should not be construed as an agreement with such statement.

Q. ARE THERE ANY MATTERS UPON WHICH YOU GENERALLY AGREE WITH WITNESS SPANOS?

A. Yes. Generally, Company witness Spanos and I both agree that there should be an increase in depreciation rates for BGWC.[1] The Company's current depreciation rates are based on a composite average service life of about 66.67 years for all assets. The historical data and other evidence provided by the Company indicate that the average service lives for the assets in most of its accounts should be shorter than this.[2] Likewise, both witness Spanos and I agree that there should be a net salvage component to depreciation rates.[3] However, as described in my direct testimony, I believe the Company's requested increase is

[1] Rebuttal Testimony of John Spanos, Page 5.

[2] Exhibit DJG-5 and Exhibit DJG-7.

[3] Rebuttal Testimony of John Spanos, Page 6, lines 1-2.

unreasonably excessive, especially in consideration of the evidence provided to support the proposed increase. This is true in terms of service life and net salvage estimates.

Q. PLEASE SUMMARIZE WITNESS SPANOS'S CRITICISMS OF YOUR APPROACH TO ESTIMATING SERVICE LIFE.

A. Witness Spanos claims that my service life estimates are "based solely on mathematical best fit curves,"[4] and that I "[do] not consider visual curve fitting in [my] recommendation."[5] Witness Spanos also indicates that my approach to estimating service lives is at odds with the National Association of Regulatory Utility Commissioners ("NARUC") depreciation manual.[6]

Q. DO YOU AGREE WITH WITNESS SPANOS'S CRITICISMS OF YOUR APPROACH TO ESTIMATING SERVICE LIVES?

A. No. First, witness Spanos is incorrect when he states that my life estimates are based solely on mathematical best fitting curves and that I do not incorporate visual curve fitting techniques. The following examples will prove this.

Q. DID YOU SELECT THE BEST MATHEMATICAL CURVE FOR ACCOUNT 1125?

A. No. The following graph is the same that was presented in my direct testimony for water account 1125. For this account, witness Spanos selected the R2-70 curve, and I selected the R1-95 curve. Both Iowa curves are shown in the graph below along with the observed life table ("OLT") curve.

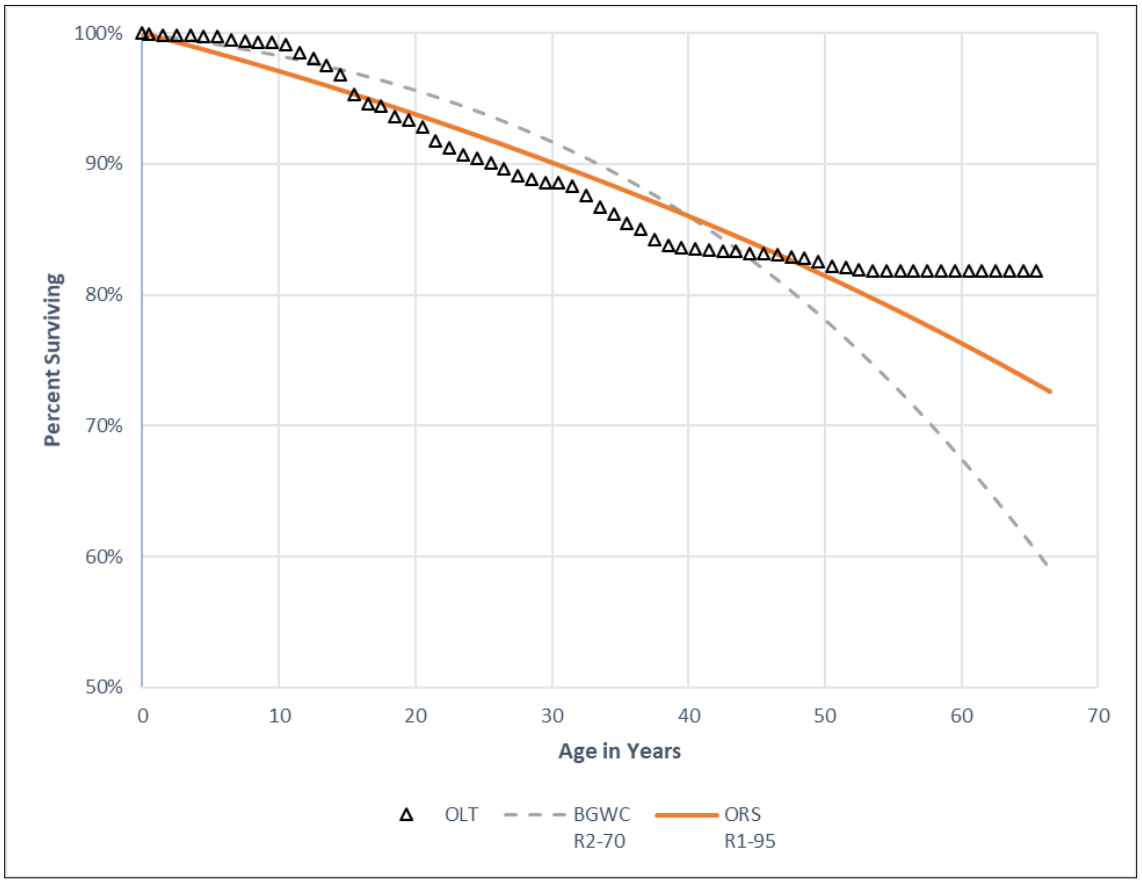
[4] *Id*. at Page 4, lines 1-2.

[5] *Id*. at Page 5, lines 2-4.

[6] *Id*. at Pages 13-14.

Figure 1:

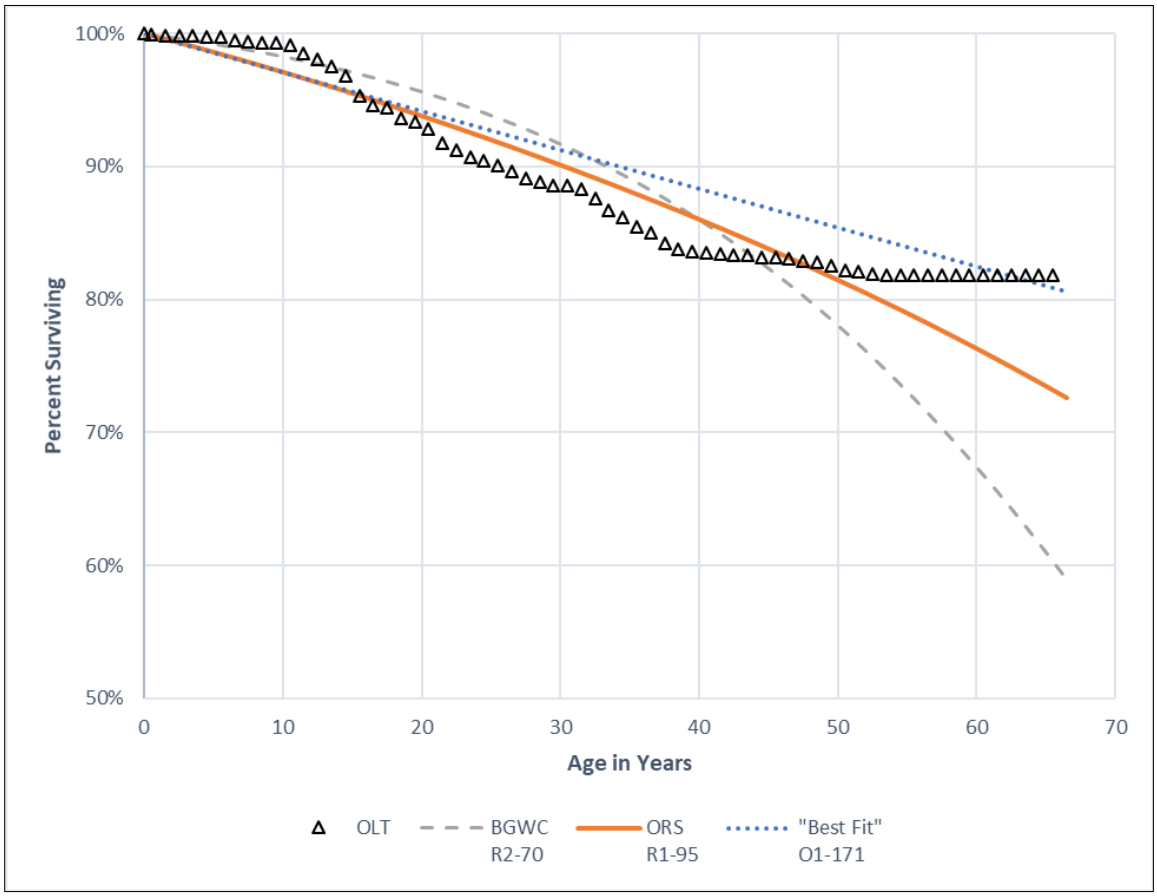
Account 1125 – Transmission and Distribution Mains



As discussed in my direct testimony, the R1-95 curve is a better mathematical fit compared with the R2-70 curve. The Company bears the burden for this account (and all of its account) to make a convincing showing that it's proposed depreciation rate (and thus proposed service life) is reasonable. As with its other accounts, witness Spanos did not present any convincing evidence outside of the statistics (i.e., the data shown in this graph) as to why the R2-70 curve results in the most reasonable depreciation rate for this account. While the R1-95 curve results in a *better* mathematical fit, it is not the *best* mathematical fit. The graph below shows the same curves presented above, but also with the best mathematically fitting curve for this account, which is the O1-171 curve.

Figure 2:

Account 1125 – T&D Mains – With Best Mathematical Curve



If the O1-171 curve were selected for this account, it would be implying that the assets in this account, on average, would remain in service for 171 years. The reason I did not select the O1-171 curve for this account, despite it being the best mathematically fitting curve, is because I incorporate professional judgment and visual curve fitting techniques into my analytical approach to service life estimates, in direct contradiction to witness Spanos's claims discussed above. By using visual curve fitting techniques, I suspected that the tail end of this Iowa curve may be less statistically relevant for analytical purposes (due to its flattened shape after age 50). My further analysis of the observed life table for this account

confirmed that suspicion based on visual curve fitting was correct. I also incorporate professional judgment in my analysis by concluding that a service life of 171 years would be unreasonably long given the types of service lives observed in the industry for this account. Although I have shown only Account 1125 for this example, I use the same approach regarding my service life estimates for each account. Sometimes I may select the best mathematically fitting curve, but not before incorporating visual curve fitting techniques and professional judgment. Often, the Iowa curve I select is *shorter* than the best mathematically fitting curve, which means that my incorporation of professional judgment and visual curve fitting techniques actually leads to a *higher* depreciation rate and expense than what would have resulted if my estimates had been "based solely on mathematical best fit curves,"[7] as witness Spanos claims.

Q. IS YOUR APPROACH TO ESTIMATING SERVICE LIVES IN CONFORMANCE WITH AUTHORITATIVE DEPRECIATION TEXTS?

A. Yes. Witness Spanos claims that my approach to estimating service lives is at odds with the NARUC depreciation manual because of my emphasis on mathematical curve fitting.[8] I would generally agree that if a depreciation analyst simply selected the best mathematically fitting Iowa curve for each account without question, it would run the risk of being at odds with the preferred analytical approach described in the NARUC manual and other authoritative texts in the industry. Fortunately, however, I am not taking such an

[7] *Id*. at Page 4, lines 1-2.

[8] *Id*. at Pages 13-14. The NARUC manual is considered an authoritative text in the field of depreciation analysis for utility companies. National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices* (NARUC 1996).

approach. If I were simply selecting the best mathematically fitting Iowa curve for each account, I would have selected the O1-171 Iowa curve for water Account 1125, as illustrated above. Likewise, I would have selected longer Iowa curves for many other accounts had I taken such an approach. Instead, however, my approach of using a combination of visual and mathematical curve fitting technique along with professional judgment is in conformance with authoritative depreciation texts, including the NARUC manual.

Q. DO YOU HAVE ANY OTHER COMMENTS REGARDING WITNESS SPANOS'S CRITICISMS OF YOUR APPROACH TO ESTIMATING SERVICE LIVES?

A. Yes. Contrary to witness Spanos's rebuttal testimony on this issue, I believe that my approach to estimating service lives does not greatly differ from witness Spanos's approach. Witness Spanos attempts to distinguish our approaches by suggesting that I rely "solely"[9] on mathematical techniques, while he incorporates "informed judgment."[10] In reality, we are both using a combination of objective analysis and professional judgment. It is not a question of absolutes, but rather of degrees. It is fair to say that I rely more on objective analysis than does witness Spanos (as discussed in my direct testimony regarding my service life adjustments). One reason that I give more weight to the objective analysis is that this in an evidentiary proceeding, "informed judgment" alone is not evidence, especially considering the burden of proof that the *Company* must meet to show that its depreciation rates are not excessive. When the Commission is presented with two service

[9] *Id*. at Page 4, lines 1-2.

[10] *See e.g. id*. at Page 11, line 8.

life proposals for a particular account, it should select the curve that is supported more by the objective evidence. As shown in my direct testimony, each of the Iowa curves I proposed in the accounts at issue are more supported by the objective evidence than are witness Spanos's Iowa curves.

Q. PLEASE SUMMARIZE WITNESS SPANOS'S REBUTTAL TESTIMONY RELATED TO YOUR NET SALVAGE RATE PROPOSALS.

A. Witness Spanos takes issue with my description of some of his net salvage proposals as "excessive."[11] He claims that my net salvage proposals in another case, as well as my relatively small adjustments to net salvage undermine my claims that witness Spanos's net salvage rate proposal are excessive.

Q. DO YOU HAVE ANY RESPONSE TO WITNESS SPANOS'S REBUTTAL TESTIMONY REGARDING THE ISSUE OF NET SALVAGE RATES?

A. Yes. First, it appears witness Spanos is interpreting the word "excessive" differently than I am. When I suggest the Company's proposed net salvage rates are "excessive," I mean that they are "exceeding what is necessary,"[12] which is based on the standard definition. There are a few reasons why it is reasonable to conclude that the Company's proposed salvage rates are excessive. First, the Company's currently approved net salvage rates are zero.[13] As discussed above, I generally agree with witness Spanos that some level of negative net salvage should be considered in calculating the Company's depreciation rates. However, large increases in negative net salvage in any given cases are generally not

[11] *Id*. at Pages 6-9.

[12] Merriam-Webster online dictionary. https://www.merriam-webster.com/dictionary/excessive

[13] Response to Energy Operations Request #24, Question 8.

preferable because it can result in a substantial increase in rates to customers, sometimes known as "rate shock." While acknowledging again that the Company's current net salvage rates are zero, witness Spanos is nonetheless proposing 20% increases in negative net salvage rates. Proposed increases this significant could be fairly described as "excessive" under most circumstances. Furthermore, the Company has provided no significant evidence to support its significant increases to negative net salvage. Increases to net salvage of 20% could likely be excessive *even if* there is at least some evidence supporting some level of increase. In this case however, witness Spanos admits that "[h]istorical net salvage data was not available for [BGWC]."[14] One could argue that a complete lack of evidence to support a net salvage increase could result in no increase at all; however, under the unique circumstances in this case (where historical net salvage data is not yet available) it would be arguably unfair to BGWC to completely disallow net salvage recovery. The net salvage rate adjustments presented in my direct testimony strike a fair balance between a complete disallowance of net salvage and the significant, unsupported increases in negative net salvage proposed by witness Spanos. As BGWC accumulates net salvage data over time, we can use that data to develop accurate net salvage estimates. In the meantime, however, it is not fair or reasonable to customers to increase net salvage rates by up to 20% without any historical data to support such an increase.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

[14] Rebuttal Testimony of John Spanos, Page 7, lines 3-4.